Instructional Technology Newsline

Department of Elementary and Secondary Education

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In This Issue . . .

◆ Instructional Technology Update

"It was the best of times. It was the worst of times." In early April, Instructional Technology staff informed 38 districts they had been selected for the FY02 eMINTS Program, and we began gearing up for a record number of Competitive Technology grant applications. By mid-April, however, we learned that the Department's technology budget had been targeted for reduction because of state revenue and budget problems. The call to action by Missouri's educators the last two weeks of April was impressive. It was gratifying to see the number of people who wrote letters, emails, and faxes to legislators, and to read about all the ways technology is improving teaching and learning across the state. Even in times of uncertainty like these, or in spite of them, I am confident that Missouri's educators will continue to find new and creative ways to help students achieve. Let's 'keep the faith' and the educational technology momentum moving forward. –Deb

Transition to Internet Explorer 5.0 or above as browser standard for DESE's Web application system (k12apps.dese.state.mo.us/webapps/logon.asp) beginning July 1, 2001

Beginning July 1, 2001, DESE's Web application system accessed via <http://k12apps.dese.state.mo.us/webapps/logon.asp> will be certified tested in Internet Explorer 5.0 or above **only**. As a result, users will need to access this system using Internet Explorer 5.0 or above. This will allow for both DESE and those using any of these Web application systems to take advantage of some added functionality. If you currently use one of our Web application systems and your school is a participant in the DESE Technology Network Project, please contact one of your district's Technology Coordinators for further information about Internet Explorer. Otherwise, Internet Explorer can be downloaded for free at: <http://www.microsoft.com/WINDOWS/IE/DEFAULT.HTM>

Note: This change does not imply all computers in your district need to have Internet Explorer 5.0 or higher, *only those computers that will be accessing one of our Web application systems on k12app.dese.state.mo.us*. Also, support of both Netscape and Internet Explorer will continue for those accessing <http://www.dese.state.mo.us>, our public access Website.

FY01 Instructional Technology Grant Programs

New Final Expenditure Report Deadline

FERs must be submitted by no later than **June 1, 2001**. Grant recipients of TAG/VIDEO, Competitive Technology, and Interactive Distance Learning grants should be winding up activities and expenditures and preparing to file any amendment that might be necessary before submitting the program evaluation and final expenditure reports. Last month, the Department was informed by the Office of Administration that all FY01 Programs must be closed out by June 30. As a result, we will not be able to issue any July or August payments. *[Note that previous correspondence mentioned a June 15 FER deadline and that no August payment would be made; this letter is to inform you that the deadline has been moved again.]*

TAG/VIDEO FERs Available Online on May 1

The FERs for the Technology Acquisition and Enhancement and VIDEO grant programs are now available on the DESE web applications site. Be sure to indicate all funds expended for both the TAG and VIDEO FERs; however, no additional payment for VIDEO will be issued. Copies of the FERs for Competitive Technology and Interactive Distance Learning grants can be found in the Consolidated Manual and can be faxed to us at (573) 522-1134.

Special Payment Issued in May

To help districts transition to a June FER deadline and to keep from lapsing program funds, Instructional Technology will issue an additional payment to grant recipients in May. This payment, for Technology Acquisition and Enhancement, Competitive

Technology, and Interactive Distance Learning grants, will equal 45% of the approved State amount. Any balances after this payment will be issued upon the Department's approval of final expenditure reports that are received by the June 1 deadline date.

2001 Census of Technology Deadline Moved to May 11

Because of some glitches, the deadline has been extended to May 11 for submitting Census of Technology data, which comprises the new April 2001 Core Data cycle. For many of you it was your first time participating in Core Data and in securing the necessary login privileges. Some of you experienced trouble with the submit button; some had trouble saving some of the questions asked on the building-level forms. Yet, even with these glitches, it appears that most districts met the April 30 deadline. Thanks to all who have already completed the forms. We appreciate your timely and accurate information as well as your patience with the new forms. Note that districts must complete the 2001 COT in order to be eligible for FY02 TAG grants.

FY02 Instructional Technology Grant Programs

Technology Core Budgets Reduced for FY02

The bad news is that the VIDEO Program is funded at 25 percent capacity ($1.09 million versus $4 million) and the Competitive Technology Budget was zeroed out. The good news is that funding for Technology Acquisition and Enhancement grants and Interactive Distance Learning grants is stable. Also, funding is secure for the MOREnet Technology Network Program and the eMINTS program.

TAG/VIDEO Applications for FY02 Go Online on/about May 7

The joint Technology Acquisition and Enhancement and VIDEO application will look very similar to this year's application, including the same funding formulas. The amount appropriated for TAG grants remains at the $12 million level. The amount appropriated for VIDEO is $1.09 million, but the application is set for a $4 million program. The Department will again request supplemental VIDEO funds to reach the $4 million threshold; however, we can only guarantee the amount appropriated at this time. Applicants should be advised that the first VIDEO payment, equal to 25% of the total State Request, might be all that is distributed. Districts should plan activities and expenditures accordingly.

Applications can be submitted anytime, from May 7 through September 15, 2001. Applications will be substantially approved effective July 1. The first payment (50 percent of the approved TAG State request) will be issued upon final approval of the grant. Note that September is the first month that first payments will be made.

Interactive Distance Learning (IDL) Grants Due June 15

The IDL Program will be funded at $900,000, to support existing IDL clusters and consortia. Applications must be postmarked on or before June 15, 2001. We will accept IDL applications from existing clusters/districts for Upgrade grants and from new consortia/ districts for Implementation grants that connect to existing clusters. Applicants must submit two copies of the paper applications and must follow the guidelines

regarding the maximum number of pages, font size, margins, etc. A panel of readers will evaluate the applications the week of June 25-29. Applicants will be notified of their funding status by July 5.

Districts Receive Tentative Approval for eMINTS program

In March, the Department received 42 New and 53 Expansion eMINTS grant applications. New applications were evaluated based on participation in school-wide renewal programs, appropriate class size, high free/reduced lunch rates, low technology census data, as well as responses to questions asking about how eMINTS fits with district CSIP and technology plans. Expansion districts were evaluated based on commitment for building-wide expansion, willingness/capacity for mentoring, current teacher participation, and involvement with teacher preparation and higher education institutions. Below are lists of the districts receiving tentative approval to participate in next year's eMINTS program.

New eMINTS Districts Tentatively Approved, by Cluster

BOOTHEEL
- Chaffee
- Scott County R-IV
- Puxico

CENTRAL
- Community R-VI
- Mexico
- Osage R-II
- Morgan County R-II

EAST
- St. Louis
- Rockwood
- Meramec Valley
- Union

NORTHEAST
- Adair County
- Lewis County
- Monroe City
- Hannibal
- Putnam County

NORTHWEST
- North Andrew
- Jefferson C-123
- Maysville
- South Harrison R-II
- Lexington

SOUTH
- Bunker
- Alton
- Thayer

SOUTH CENTRAL
- Crawford County R-I
- Crocker
- Laquey

SOUTHEAST
- Jefferson R-VII
- Windsor
- Valley R-VI

SOUTHWEST
- Marion C Early
- Southwest R-V
- Cabool
- Crane

WEST
- Kansas City
- Center
- Raytown
- Raymore-Peculiar

eMINTS Expansion Applications Tentatively Approved, by Cluster

BOOTHEEL
- Bernie
- East Prairie

CENTRAL
- Boone County R-IV
- Moniteau County R-I
- School of the Osage

EAST
- Valley Park
- Parkway

NORTHEAST
- Kirksville
- Shelby County

NORTHWEST
- Smithville
- Maryville

SOUTH
- Eminence
- Van Buren

SOUTH CENTRAL
- Lebanon
- Plato

SOUTHEAST
- Festus
- Farmington

SOUTHWEST
- Carthage
- Nixa
- Stockton

WEST
- Lee's Summit
- North Kansas City
- Warrensburg
- Independence

Technology Network Program Packets Distributed to Districts
MOREnet distributed information packets to districts in mid-late April. These packets detail the various services available under the Technology Network Program (TNP). Districts currently participating in the TNP are automatically re-enrolled for next year, so no applications need to be returned to MOREnet or DESE. Districts need only to update their contact lists and fax that information back to MOREnet Project and Event Services at (573) 884-3395.

Information Workshops Handouts Posted On Web Site
The handouts that were distributed during the spring 2001 Instructional Technology Workshops are posted on our web site under "Professional Development." Note that these materials are dated: they were created in March, prior to recent budget actions by the General Assembly. Nonetheless, the handouts provide important information about the various grant programs, their application and approval processes, and grant-writing tips.

State Approval of District Technology Plans

To be eligible for TAG grants, every district must develop a long-range technology plan that supports the district's comprehensive school improvement plan and is approved by the local school board and the Department. State approval is good for up to three years.

State approval is also necessary for district participation in the Universal Service Fund for e-rate discounts.

According to our records, approximately 135 districts are out of compliance: 20 districts haven't yet submitted a plan for state approval, 10 districts are in their first approval process, and over 100 districts have plans with expired approval dates. These districts have until September 15 to get into compliance or be determined ineligible for TAG funding and e-rate discounts. The next major review of district technology plans is scheduled for September 28, 2001.

Districts were informed last year that the Department would give a one-year waiver to districts to get their technology plans developed or revised and approved or re-approved. A task force was formed in August to help identify and develop resources that help districts develop effective plans. A new technology planning assistance web site was posted last month that helps districts successfully go through the technology planning stages. This "Creating a Technology Plan" web site can be found at http://www.dese.state.mo.us/divimprove/instrtech/techplan/techplan.htm Plans ready for state approval should be submitted to the Instructional Technology section prior to September 15, 2001.

E-rate Update – New Funding Commitment Letters Issued for Year Two

On April 27, 2001, the Universal Service Administrative Company (USAC) issued Wave 21 of funding commitment letters for Year Two. This wave represents applications that had not been previously funded in Year Two (7/1/99-6/30/00). Federal Communications Commission (FCC) rules include a provision that allows for funding of applications filed after the filing window if funding is available. Such was the case for Year Two and the applicants featured in Wave 21 benefit from this FCC rule. With Wave 21, the Schools and Libraries Division (SLD) committed over $2.1 billion in more than 30,100 letters for Year Two.

FAQs about the Children's Internet Protection Act

We have received calls and email, asking what impact the Children's Internet Protection Act (CIPA) has on TLCF grant recipients and districts that participate in e-rate via the MOREnet contract or by filing their own applications.

Q: What is the applicability of the recently enacted Children's Internet Protection Act (CIPA) to recipients of funds under the Title III Technology Literacy Challenge Fund (TLCF) Program?

A: The CIPA requirements apply beginning the next "program funding year" after the effective date of the legislation (April 20, 2001). Because TLCF is current-funded and grant awards have already been made by the U.S. Department of Education to the states, the portion of the CIPA legislation that relates to TLCF funds (i.e., section 1711 of CIPA) does not apply to TLCF recipients at this time. Rather, the CIPA section 1711

requirements will apply to certain local educational agencies and schools that receive TLCF funds under next year's TLCF appropriation, to the extent that TLCF funds are appropriated next year.

Q: My district participates in the MOREnet Technology Networking Program. What must we do now to be in compliance with the Children's Internet Protection Act (CIPA)? Will MOREnet help districts get into compliance?

A: As mentioned above, districts filing for e-rate discounts will be the first to have to certify whether they are in compliance of CIPA. Since applicants will be given a year to get into compliance, districts have some time to investigate what will work best for them. [See February and March issues of Newsline regarding web sites with helpful resources.]

Meanwhile, Department and MOREnet staffs are investigating how to help Missouri's schools and libraries meet CIPA compliance. MOREnet has studied what other state networks are doing. The current plan includes developing a Request for Information (RFI) to be sent to Internet filtering software companies, that explains the MOREnet backbone, describes the different levels of filtering capabilities needed and desired, and asks companies to describe possible solutions. If responses look hopeful (in terms of technology and finances), then a Request for Proposal (RFP) will be developed. If we decide that filtering can be handled from the state network, it is possible for MOREnet to request an additional waiver that would give us another year to get into compliance.

◆ MODLA Surveys Distance Learning Training Needs

www.modla.org

The Missouri Distance Learning Association is conducting a survey of the distance learning training needs of Missouri educators. The survey is enclosed in the Department's consolidated mailing to school administrators this week. Please complete the survey and fax it back to MoDLA at (660) 543-8333. Contact Lora Smith, executive director of MoDLA, if you have any questions. She can be reached by phone at (660) 543-8724 or by email at losmith@cmsu1.cmsu.edu

◆ METPA Sponsors Free Forum on Finance Issues for Educational Technology

http://www.indep.k12.mo.us/metpa/metpa.htm

METPA presents a panel of experts that have been successful in utilizing different methods to finance technology in their districts. Confirmed speakers include:
Dr. Marilyn Terry, Pattonville School District-- Using a Bond Issue to Fund Technology
Deborah Sutton, DESE-- State Technology Grants (TLCF, TAG, Competitive Tech, IDL)
Dr. David Rock, Independence—How Independence Uses Leasing and the Independence Cell Phone Program
Dan Clark, Ste. Genevieve—Using a Prop C Rollback to Fund Technology
Jeanne Sullivan, MOREnet—E-rate Program

WHAT: A Forum—"Ways to Fund Technology"
WHEN: Thursday, May 3, 2001, 12:30 pm to 3:30 pm
WHERE: Ike Skelton Training Center, Militia Drive, Jefferson City, MO
COST: It's Free!!
WHO SHOULD ATTEND: Superintendents, Technology Coordinators/Directors, District Administrators, Teachers and Board Members

◆ eMINTS Program Offers Professional Development for non-eMINTS Teachers

A weeklong professional development opportunity will be provided to Missouri educators by the eMINTS Cluster Instructional Specialists who work with teachers in the eMINTS project. The eMINTS Summer "Teaching with Technology" Sampler will provide a concentrated learning experience for non-eMINTS elementary and middle school educators who wish to improve their knowledge and skills in using multimedia technology to enhance inquiry-based learning.

The eMINTS project is a joint effort of MOREnet (Missouri Research and Education Network) and DESE. The eMINTS project places cutting-edge technology in selected third- and fourth-grade classrooms across the state and provides teachers with extensive professional development and in-classroom support in learning to use the technology in ways that enhance inquiry-based learning.

The following topics will be covered:
Using the Internet for Inquiry-based Learning
Acceptable Use Policies
Office 2000
File Management Techniques
Using Digital Cameras and Scanners
Inspiration Software
Online Projects
Creating a Web page for Your Classroom
Introduction to Webquests

The Summer "Teaching with Technology " Sampler will be held 9 a.m. to 4 p.m. July 16-20 (lunch, snacks and materials provided) and will be offered at three locations: Branson (Branson High School), Chesterfield (River Bend Elementary), and Columbia (MOREnet Training Facility)

The cost per participant is $100 for the week to cover food and materials. Participants are responsible for travel and lodging. Hardware and software will be provided.

Participation in the program is limited to 24 participants at each site. Priority given to non-eMINTS educators. Online registration is available at http://emints.more.net

◆ McREL Technology Institute Focuses on Rural Needs

Mid-continent Research for Education and Learning (McREL) is pleased to announce its 2001 Annual ***Rural Technology Institute*** in Denver, Colorado, July 25-27. This hands-on seminar is an outstanding opportunity for rural school or district teams to increase their capacity to use technology for learning.

Rural schools or districts in seven states (Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota, and Wyoming) may register to send three (or at least two) individuals to attend strands focusing on technology administration, curriculum integration, and infrastructure support.

McREL is able to waive the registration fee for rural schools/districts within the 7-state McREL service region, but participants are responsible for their own lodging and transportation costs. To ensure personalized instruction, the Institute is limited to 80 participants.

We suggest that school or district's team consist of the following members:
School/District Administration -- to attend the Technology Administration Strand
Curriculum Integration/Professional Development -- to attend the Curriculum Integration Strand
Technology Support -- to attend the Infrastructure Support Strand

Participants will learn about the latest innovations in educational technology, how to acquire resources for system support, and strategies for integrating technology into the curriculum, all tailored to meet the unique needs of rural schools and districts.

Teams should sign up early to ensure that their school or district can benefit from this high quality training opportunity. The registration deadline is June 15.

More detailed information about the Rural Technology Institute and registration information is available at www.mcrel.org/rti, including an online registration form.

McREL, based in Aurora, Colorado, is a private, nonprofit organization whose purpose is to improve education through applied research and development. McREL provides products and services, primarily for K-12 educators, to promote the best instructional practices in the classroom. For further information, contact Kevin Cooney at McREL: 303.632.5561 or kcooney@mcrel.org (email)

◆ Learning With Technology

-Featuring Moniteau Co. C-I, Jamestown and Rolla 31

Moniteau Co. C-1 School, Jamestown
The goals of the ***Eagles On-Line*** project were to:
Ensure that all Moniteau County C-I students become technologically literate and prepared to live and work in an increasingly technological society

Ensure that teachers have the resources and training necessary to incorporate technology into the communication arts curriculum to effectively improve students' writing skills.

Prior to receiving TLCF funds in the fall of 1998, Moniteau Co. C-1 (a small rural district of 210 students in K-12 located in Jamestown) had only one computer with Internet access available to the students. This was one fairly up-to-date computer located in our school library with a dial-up connection through MOREnet. Most of our teachers did not have access to or use a computer at all. Our learning environment changed dramatically with purchases and training made possible by TLCF funds.

The first year of our grant focused on the high school classrooms. TLCF (along with Goals 2000 and TAG monies) allowed us to purchase a file server, network a major portion of our building, and establish a T1 connection with MOREnet. A 16-workstation lab was created in the high school wing and each high school teacher received an up-to-date classroom computer with up-to-date software and local network and Internet access. We also purchased a SmartBoard, multimedia projector, and digital camera. Extensive training was provided for both teachers and students and projects were created to incorporate technology into the classroom. Some of the projects included: special editions of our school newspaper (*Eagles On-Line*) highlighting students work utilizing technology, PowerPoint presentations, on-line stock market game, and Internet research. Teachers received training during after school sessions while students received training during scheduled lab sessions with the technology coordinator.

The second year of the project extended equipment and training to the elementary teachers and their students. Elementary students met with the technology coordinator to receive training and work on projects including posters, brochures, books, and an elementary newsletter. The most successful project was a computer class offered to grades 5-8 during the Summer Enrichment program during the summer of 2000.

Increased use of technology made possible in part by TLCF has certainly changed how we teach and learn at Moniteau Co. C-1. Teachers and students alike have become comfortable with technology and utilize it on a daily basis. We are continually updating our curriculum to take advantage of the increased resources available through our improved technology. TLCF had not only an immediate impact on our school when funds were received in the fall of 1998 and 1999, but continues to do so each and every day and will in the future.

Rolla 31

Rolla Middle School received an infrastructure TLCF Grant during the 1998-99 school year and received the continuation grant for the 1999-00 school year. The focus of "Communicating With Computers" was threefold: to add computers to the rooms of all communication arts teachers, to develop curriculum/computer labs primarily for communication arts teachers to use to strengthen student writing skills, and to provide in-service for teachers to help them integrate technology into lesson plans and daily instruction.

The grant worked as a close complement with other work going on within the building and the district including the completion of network wiring of all classrooms and labs and a commitment to connect to a new fiber optics network that connects all buildings in the school district. There was also an extensive effort on the part of the school district to have all teachers within the district become technologically literate.

We found that the learning curve for the teaching staff was a little longer then expected. Even though all staff members received fifteen hours of in-service instruction during the two years of implementation, I failed to allow the time necessary to practice before implementation by the teachers. We have faired very well, and I believe that the teachers are extremely pleased now that they have been through the process. We are now seeing the benefits of the first two years of implementation.

All teachers are now proficient in the use of the computers to communicate with other teachers through e-mail. They are comfortable using the Internet for research, instructing students in the computer lab, and enhancing student instruction through the use of technology in the classroom. The teachers have created over 300 lesson plans that incorporate technology. All of the plans have been categorized and filed in one of the computer labs. This way they are easily accessible and have been used by individuals and professional development teams. Teachers also utilize the labs to strengthen basic communication arts skills through Orchard and Perfect Copy software, web quests on the Internet, Accelerated Reader testing, and other resources. Students are also accessing the Internet through the classrooms. This allows them to enhance their own projects.

Our seventh grade students scored in the top ten schools in the state on the communication arts MAP test. I believe that the commitment by the communication teachers aligned well with our efforts through the TLCF Grant to help our students learn the necessary skills to be better readers, thinkers, and writers and enabled them to do well on the MAP tests. For more information contact Jerry Giger at Jgiger@rolla.k12.mo.us

◆ Reed Springs, Missouri Students Win Weekly Reader Contest
-Submitted by Janna Elfrink, Teacher, Reed Springs R-IV

The topic of ending world hunger is not a topic of discussion for most eight and nine year olds in this country. Mrs. Elfrink's third grade eMINTS (http;//emints.more.net) students at Reed Springs Intermediate School thought that it was important enough for the presidential candidates for the 2000 elections to consider. Through the Weekly Reader "Campaign 2000" series, third grade students from across the country were given the opportunity to participate in activities that would make the campaign process, and the presidential candidates more real. Throughout the presidential campaign, Weekly Reader provided students with information on the major candidates in the 2000 presidential election. Students read about the issues that were important to each candidate, and were able to learn about the election process. Along with weekly current events, students could enter a "Goals for the President" contest, where classes voted on a topic for the candidate to consider as an important issue. Mrs. Elfrink's class voted on the issue of ending world hunger over other issues such as gun violence, drug use, and school safety.

To begin the process of researching information about world hunger, Mrs. Elfrink allowed her students to use teacher approved Internet sites. What they gained from the Internet sites was the most realistic picture of world hunger. The pictures of children dying of hunger touched them in a way that they are not likely to forget. The Internet gave students the opportunity to see world hunger from many points of view.

After the information was gathered, students were able to express their views on world hunger via PowerPoint, essays, collages or illustrations. Their task was to persuade the candidates to consider the issue of world hunger where people from many countries are suffering, and then suggest some ways that, with their leadership, our country could help.

The entire process took the class a week to complete, and all of the class work was sent in as one entry. In less than a month, the class learned that they were grade level winners for the "Goals for the President" contest! As winners, the class was recognized on the Weekly Reader website, (www.weeklyreader.com) and received $100.00 to spend on classroom resources. They were also recognized in the local newspaper, and students from the class were asked to present their PowerPoints to School Board members at their monthly meeting.

Through the eMINTS program, and use of the Internet, these students were able to participate in the "Campaign 2000" activities, follow the progress of the election process and the campaign trail of the major candidates, and learn about an issue that would have otherwise been far removed from the understanding of most students in the United States.

◆ Ten Ways To Be A Technology Leader

--Shared with permission from Shirmel Richards, Online Editor,
richards@eschoolnews.org
abstracted from "The Next Step: Managing Your District's Technology Operations" by Steven C. Pereus Electronic School, March 2001,
http://www.electronicschool.com/2001/03/0301f2.html

Technology can improve student performance and managerial efficiency. However, the mere presence of computers itself does not lead to academic gains or administrative efficiency. In fact, there is evidence that disorganized additions of computers actually reduce student achievement, distract administrators from their primary goals, and waste funds.

Here are 10 strategies administrators should undertake to assure that their technology programs realize their promise:

1. Provide leadership. Become an advocate for using computers to address broad needs, while paying special attention to finding the opportunities that most directly address local concerns. Work with the school board and superintendent to find points of agreement on priorities and vision, as these parties control spending. When problems emerge--missed

deadlines, cost overruns, etc.—address them immediately, even if it means delaying implementation of a program until it can be done correctly.

2. Regularly review your technology plan. Because students' needs evolve and the computer and software industry constantly produces innovations, a district's technology plan cannot be static. It is especially important to review key investment decisions in the plan to make sure they directly contribute to the district's overall educational goals. This also helps guarantee that projects are adequately funded, from purchase to installation to training.

3. Carefully consider each purchase. School district officials who have funds to purchase technology may be overwhelmed with their choices. It's critical that good decisions are made when spending these precious dollars, especially since early hardware and software decisions will drive investments in the entire program for years. Consider technology purchases to be at least as complex as other infrastructure projects, and go through the entire routine of requests for proposals, documentation of system requirements, vendor presentations, site visits, software evaluation, comprehensive cost analysis, and tests of software. Also, make sure your vendors have a strong track record.

4. Set a single standard. Don't let individual schools or administrative departments use incompatible software that can't "talk" to other systems. Fewer software platforms also require less spending on training and upgrading.

5. Don't try to design software. School systems rarely have staff members with the training to design unique software applications to meet a district's needs. Fortunately, there are off-the-shelf products that make this "do-it-yourself" mode unnecessary. Find a good vendor and pay that company to modify existing software, as needed.

6. Don't move too fast. Implementation places extreme demands on a district's current mode of operation, and it can be stressful to staff. Be realistic about how quickly a new system can be adopted. Separate implementation into steps that enhance (but do not significantly modify) current practices and those that require radical change. For steps that are significantly different, make sure you provide training and demonstrate a personal belief in the new way of doing things.

7. Get everyone involved. Everyone who is affected by an increased use of technology in the classroom or administration should have a role in both planning and implementation. Cross functional teams can help improve acceptance of change.

8. Support your technology systems. System maintenance and upgrades are essential. Teachers and staff members will lose interest in technology if their equipment does not work. Create a dedicated management information systems (MIS) department, rather than relying on troubleshooters randomly placed throughout the school system. This department must resolve problems promptly, not in three or four weeks. Analysts say one technician can service up to 300 personal computers, so don't exceed this ratio.

9. Evaluate the effectiveness of technology. Don't be afraid to learn about what's working and what isn't working, both in the classroom and in administration. Come up with quantitative measures of user satisfaction and output (student achievement, efficiency in the purchasing department, etc.).

10. Hire good people. Technology is one of the most exciting areas in education today, and it is attracting some well-trained, motivated people. Find them, and give them exciting challenges. This will help keep these people in your school system.

◆ Show Me Missouri Project

The Missouri Geographic Alliance has announced it's first ever statewide project for authentic learning with students of Missouri classrooms. The Show Me Missouri Project is a standards-based geographic look at the counties of Missouri by the students that live in them. This class project can focus on any aspect of your county, with the project tailored to fit the needs of your students. Projects can focus on science, geography, communication arts or possibly provide an exciting cross-curricular study you want your students to complete. Did we mention these projects would help improve MAP proficiency? Two Professional Development sessions for the participating teachers will be held free of cost at UM-St. Louis June 25-26. Teachers may approach this project in teaching teams of up to three teachers. Only the group leader would need to attend the PD session. A stipend will be awarded upon completion of all project activities. For full information, please contact Carol Craig at 314/516-7517 or mgacraig@umsl.edu. Let's see YOUR county on our web site for all the world to see.

◆ *GIS in the Classroom*

The Missouri Geographic Alliance and Missouri Botanical Garden present their second institute to correlate science related studies with Geographic Information Systems software (GIS) for hands-on learning in grades 3-12 this July. GIS is the mapping software that is such a hot topic for classroom projects. This year's project will involve earth science studies in Mapping Natural Disasters. Project elements include: one week's summer training in St. Louis (July 16-20) or Springfield (July 23-27), two week-end follow-up sessions in the fall and spring, and hands on activities to interest your students all year long. For further information or to apply, call Bob Coulter at 314/577-0219. Graduate credit is available.

◆ *The Degree Confluence Project*

-Submitted by John Waite, Technology Coordinator, DeSoto School District

Two DeSoto High School seniors, Jason Gannon and Joe Twellman, recently participated in an international research project. The Degree Confluence Project was designed to record a sampling of the earth's geography by visiting every point on land where a degree of latitude crosses a degree of longitude. These spots are known as confluences.

Armed with a Garmin Etrex Global Positioning System (GPS), road maps, USGS topographic maps, and digital cameras; they traveled to a remote location near Van Buren, Missouri, to document the 37º North Latitude, 91º West Longitude confluence. After visiting the site they posted a description of their visit and six photos on the project web site.

“It was exciting to be a part of a project that is happening all over the world,” Jason said.

The University of Missouri-bound seniors completed the project as part of an independent study in technology. “When I heard about this project, I thought it would be an interesting activity for Jason and Joe,” said DeSoto Technology Coordinator, John Waite. “It required them to learn to use a GPS and coordinate several types of maps. After they visited the confluence, they had to write a short story about their trip and post the story and photos on the web site. Now I’m requiring them to put together a multimedia presentation on the project so they can show it to other students.”
The students originally planned to visit a confluence near Anthonies Mill, northwest of Potosi, but someone beat them to it. They made the visit to Van Buren on March 22 and submitted their story and photos the next day. It took a couple of weeks before the information was actually on the web site.

“It was a lot of fun. But it would have been better if it wouldn’t have rained so we could have done some fishing on the Current River like we planned,” said Joe.

There are about 11,500 confluences on land around the world. Over 600 of the sites in 45 countries have been visited and photographed so far. Adventurers have documented confluences on all seven continents. Confluences have been photographed from Burkina Faso to Bulgaria, from Norway to New Zealand. While many of the confluences are relatively easy to visit, some require a great deal of effort. About five percent of the attempts are unsuccessful.

Of the 1000 confluences in the United States, nearly half have been visited and photographed. The state with the most confluences visited is California, where 34 of 45 have been documented. Alaska has the most confluences with 168, but only two have been visited. Three states, Delaware, Rhode Island, and Hawaii, have no land confluences.

Missouri has 18 confluences within its borders. The confluence visited by Jason and Joe was the twelfth documented. Those left to be visited are either in northern Missouri or extreme southern Missouri.

Information about the project and descriptions of all confluence visits, including Jason and Joe’s, may be seen at the Degree Confluence Project web site at: http://www.confluence.org on the Internet.

◆ Showcasing Missouri's PT3 Grants

-Southwest Missouri State University, Springfield, Missouri

The College of Natural and Applied Sciences and the College of Education at Southwest Missouri State University is preparing teachers to utilize technology to help Missouri's K-12 students construct new knowledge and increase their level of academic achievement.
The project's objectives
Help faculty teach using technology
Help students use technology in their coursework
Put students in technology-rich environments
Expose students to distance education
Create interactions between students and savvy K-12 teachers
Use technology to expose students to global community
Help faculty teach using technology
are being met by allowing faculty time and equipment to redesign courses. Faculty is allowed to reduce their course load while designing/teaching a new course, as well as the equipment required to support redesigned courses.

Students are exposed to technology rich environments as the project has provided funds to modify three classrooms with a variety of Internet capable and wireless hookups, as well as videoconferencing. The project also promotes interactions between students and technology-savvy K-12 teachers by student observations and placements with K-12 teachers from each of the partner school districts. The project also provides exposure to K-12 "best-practice" uses of technology activities, and introduces distance education opportunities to promote learning

The project is also providing science classes to rural schools via their "SMSU eHighSchool" Program.

Technology Tools Used	Software Used
Computers	Central99
SmartBoards	Blackboard
Digital Cameras	Dream Weaver
Graphing Calculators	FrontPage 2000
Scanners	Mathematics
Digital Recorders	STELLA
Data Projectors	GIS
Videoconferencing	Internet
Tegrity	

Redesigned Courses
Assessing & Personalizing Reading & Practicum
Calculus I
Chemistry
Field Geology

Geometry Foundations
Introduction to Education & Practicum
Mathematical Foundations
On-Site Methods – Science & Social Studies

For more information contact Larry Banks at (417) 836-5249 or email larrybanks@smsu.edu

◆ Professional Development Tip of the Month

-Submitted by Sally Burnett, Instructional Designer, Central Missouri State University, Warrensburg, Missouri

Ideally, professional development would be customized to the needs of individual teachers and delivered just-in-time and on-demand. The first step in providing such opportunities is to identify the needs of teachers. A number of tools exist to aid in this process.

One such tool is Profiler, located on the High Plains RTEC site at http://profiler.hprtec.org/. A survey in the library titled "**Professional Development Needs Assessment**" already exists. (It is also easy to create a custom survey specifically for your school district or building with this tool.)

For those schools and/or teachers interested in identifying professional development needs in the use of instructional technology, an excellent resource (that helps educators assess their needs and then chart progress) is UTAP, the Utah Technology Awareness Project. This extensive survey is located at http://wwwj1.uen.org/UTAP. For more information contact Sally Burnett at BURNETT@cmsu1.cmsu.edu

◆ Copyright Question of the Month

May an educator (e.g., administrator, classroom teacher, substitute teacher, or student teacher) other district employee, volunteer, or others make a copy of single-user licensed software for archival purposes (back-up copy)?

Yes. The *original* and one *use copy* may exist simultaneously, but **only** one (*original* **or** *use* copy) may be utilized at any one time.

Note: In the event the *use copy* is damaged or destroyed, another *use copy* may be created from the *original* (archival). It is usually recommended by software companies that the original software be archived for safekeeping.

The copyright document, *Copyright Applies To Everyone*, is available on the Internet http://www.dese.state.mo.us/divimprove/curriculum/copyright/index.htm .

◆ Augmentative And Alternative Communication (AAC) Can Support A Student In General Education

-Merv Blunt, Missouri Technology Center for Special Education

AAC is the use of any other means to communicate in support of, or as an alternative to, speech (Van Tatenhove, G., 1993). For individuals with disabilities who have either no speech or limited speech, AAC is an essential communication tool needed to become part of society. After the appropriate AAC device(s) have been chosen, the challenge becomes how to incorporate the AAC into the student's educational curriculum. Because every student, classroom, and curriculum is different, it is necessary to individualize the AAC system to the student's abilities, needs, and communicative environments. Listed below are a few basic AAC ideas, which can be adjusted and modified to meet a student's own specific communication needs. These AAC suggestions will work with all three types of AAC: aided, unaided, and voice output.

Using an AAC device, have the student:
1. Give popular game commands such as Red Light, Green Light.
2. Help conduct a spelling test, giving the words out one at a time.
3. Give math problems to the class.
4. Recite lines in a play or school program.
5. Use their AAC device as a greeter at an open house or conference.
6. Deliver a message to the office or another classroom.
7. Read the individual steps of an activity, such as a recipe or a craft project.
8. Announce the members of a team.
9. Read a page from a story.
10. Read the repetitive line from a story.
11. Cheer at a game. "GO TEAM!"
12. Cheer for a specific player at a sporting event. "WAY TO GO, BILL!"
13. Tell a joke or do an April Fools joke.
14. Communicate things said in playing a game, "Whose turn is it?"
15. Use social conversation during a game, "Hurry up," "You're cheating."
16. List out one-time items on a grocery list while shopping at a grocery store.
17. Conduct an interview one question at a time for the school newspaper.
18. Present fill in the blank statements to the class.
19. Respond to fill in the blank statements.
20. Play "Who am I?" or "What am I?" from clues on an AAC device. Students guess the person in history or item being described.

◆ Mark Your Calendar

May

1	Newsline published online
1	TAG/VIDEO FER window opens
May 1-Sept 15	Application Window for TAG and VIDEO Grants
3	METPA Funding for Technology Forum Ike Skeleton Center, Jefferson City, MO
8	Truman Day-State Holiday
15	Professional Development Task Force Meeting (10 am-2 pm)

	SuccessLink, Jefferson City, MO
25	Newsline articles due
28	Memorial Day—State Holiday
31	TAG/VIDEO FER window closes
June	
1	Newsline published online
1	TAG/VIDEO online FER due
15	IDL Grant Applications due (send original and one copy)
25	Newsline articles due
25-27	Reading of IDL Grants

Upcoming 2001 Conferences

June 13-15	Alabama Educational Technology Conference (AETC) Birmingham-Jefferson Civic Center, Birmingham, AL www.mcraeco.com/frames/frame-conf.html
June 13-16	Society for Teaching and Learning in Higher Education 21st Annual Conference Memorial University of Newfoundland St. John's Newfoundland, Canada www.mun.ca/stlhe2001
June 14-15	INFOCOMM International Sands Expo and Convention Center, Las Vegas, NV www.infocomm.org
June 23-26	TIE 2001 Conference: Expanding Expectations Snowmass, Colorado www.tie-online.org/c2001.html
June 23-26	National Media Education Conference Austin, TX www.nmec.org
June 25-27	National Educational Computing Conference (NECC) McCormick Place, Chicago, IL www.neccsite.org
June 25-27	Teaching and Learning Conference "Celebrating Teaching and Learning" Holiday Inn Select, Columbia, MO
June 25-30	ED-MEDIA 2001-World Conference on Educational Multimedia, Hypermedia, and Telecommunications, Tampere, Finland www.aace.org/conf/edmedia
July 18-21	First Annual Equity in Education Conference Beaver Run Resort, Breckenridge, CO National Coalition for Equity in Education (NCEE) jenifer@math.uscb.edu
July 24-26	Education Technology 2001 Ritz-Carlton Hotel, Arlington, VA Society for Applied Learning Technology www.salt.org/society_information/calendar.htm
July 30-31	Midwest Internet Institute Lux Middle School, Lincoln, Nebraska

August 6-8	International Conference on Advanced Learning Technologies Madison, WI http://lttf.ieee.org/icalt2001
August 8-10	17th Annual Conference on Distance Teaching and Learning: Distance Learning 2001 Marriott Madison West, Madison, WI www.uwex.edu/disted/conference
October 7-9	Missouri Educational Technology Conference 2001--A Technology Odyssey Tan-Tar-A, Osage Beach, MO
October 17-20	School Tech Expo—Professional Development for Education Technology Leaders Hilton Hotel and Towers, Chicago www.schooltechexpo.com
October 23-24	Connected Classroom Conference Seattle, WA
October 29-30	Connected Classroom Conference Las Vegas, NV
November 7-10	15th Annual Technology + Learning Conference Georgia World Congress Center, Atlanta, GA National School Boards Association ITTE: Education Technology Programs www.nsba.org

◆ From the Mailbag

A Summer Reading Idea

Cooperating School Districts in St. Louis, MO, has developed a summer reading program based on Scholastic Books Mother-Daughter Book Club for their Dear America series of books. To make it interesting for boys as well as girls and fathers as well as mothers, the first book they will read is Nzingha, Warrior Queen of Matamba, Angola, Africa, 1595 (study guide at http://www.scholastic.com./titles/royaldiaries/disc_nzingha.htm) by Patricia McKissack (more about her at http://www.scholastic.com./dearamerica/books/authors.htm

On May 23, 2001 at 4:30pm, CSD, the McKissacks and interested teachers and librarians will videoconference to set up the Book Club and get it started. On June 28, 2001 at 6:00pm the McKissacks will facilitate the discussion of the book via videoconference with students and parents at various school locations. Other titles and authors will be announced at a later date. There is NO COST for this.

If you would like to participate via MOREnet 3, contact: Martha Bogart, Assistant Coordinator, Distance Learning, Cooperating School Districts at 314-692-1258 (direct) or email martha@info.csd.org

If you are interested in setting up your own student/parent book club, check the Scholastic web site at http://www.scholastic.com./dearamerica/books/motherdaughter/clubinfo.htm for information and tools.

About the book: For her first book in the Royal Diaries series, award-winning writer Patricia McKissack shines the spotlight on one of the great Queens of Africa - Nzingha: Warrior Queen of Matamba. McKissack says, "Researching the life of Nzingha was a learning experience for me. I had never heard of this remarkable woman, but I am proud to know about Nzingha now. Her story is well worth telling."

Nzingha's story is filled with intrigue and adventure. The time is 1595.
The place is Africa in what is now the country of Angola. The Portuguese are the enemy who have tried for years to capture the land and people ruled by Nzingha's father. In this world of male warrior leaders, Papa Kiluanji recognizes the courage and leadership qualities in his daughter.

Do You Know An Innovative Teacher?
National Semiconductor's Internet Innovator Awards program rewards teachers who are using the Internet in fresh, new ways in the classroom to improve student learning. The Internet Innovator Awards, offered in partnership with the 21st Century Teachers Network, are given to teachers who have implemented Internet-rich curricula that have proven successful in the K-12 classroom. Winning teachers receive $10,000 personal awards-- no strings attached-- and their schools win between $15,000 and $20,000 to fund teacher training and development in the use and integration of Internet technology in education. In addition to the cash award, all of the winning schools receive a Global Connections training course valued at $3,500.

K-12 teachers in public and non-profit independent schools located in the United States are eligible. Classroom teachers, as well as resource teachers (librarians and media specialists), are eligible. Individual teachers and groups of teachers may apply. Groups of teachers may have up to three members and represent up to three schools. Fourteen awards will be given in the fall of 2001.

The application process for the Awards is entirely online. Eligible teachers may access the application from the Awards web site at www.nsawards.com.
In the site they will find detailed instructions for navigating through the site and helpful tips for completing the application. Please note that applications require both the applicants and their principals to complete questions. All applications will be judged by an independent panel of experts in the field of instructional technology.

Completed applications must be submitted through the Awards web site, www.nsawards.com , by Friday, June 22, 2001. Winners will be announced and awards will be distributed to winning teachers and their schools in October, 2001.

Fall Dual Enrollment Opportunities from CSD
Several distance learning dual enrollment classes have been set up for next fall, 2001 with St. Louis Community College at Meramec. These are classes that high school students can take and they will get both high school and college credit. You do not have to have a lot of students interested, as we combine schools over the videoconferencing equipment, and a few students at each location make up a whole class for the teacher.
GE 100: Earth Science M,W 9/1/01-12/19/01 7:30-9:00am
HUM 115: The Holocaust: Life and Death During the Nazi Era M, W 9/10/01-12/19/01

1:00-2:30pm
BUS 104: Intro to Business Administration M, W 9/10-01-12/19/01
2:30-4:00pm
ART 100: Art Appreciation T, TH 9/11/01-12/20/01 1:00-2:30pm
ENG 207: Humor in American Literature T, TH 9/11/01-12/20/01 2:30-4:00
If you are interested in registering students for these courses for next year, contact Martha Bogart at 314-692-1258 or email Martha@info.csd.org

Summer Professional Development Opportunities
Wondering what to do with yourself all summer long? Want to upgrade your skills but don't want to spend hours in a classroom? These opportunities came to our mailbag – maybe one of them will be just what you are looking for!

Join with colleagues locally and across the country this summer to continue learning after schools close. Brochures describing twelve professional development workshops and their summer broadcast schedule are now available. If you did not receive one, or would like multiple copies for use in your district, call us at 1-800-228-8030. The information is also available on the Annenberg/CPB Channel Web site at http://www.learner.org/channel/workshops/summer01/ Feel free to use the information described there for your own newsletters and brochures. Don't forget to REGISTER by the deadline on June 20-- to insure timely receipt of the free support materials and participant certificate.
Classroom.com is rolling out some new content and is offering some of their courses for free. http://www.classroom.com/home.asp\

Barnes and Noble has some really good courses for free. The courses rotate so they're not always available (and of course they're mostly trying to sell books) but the courses are pretty good. http://www.barnesandnobleuniversity.com

Check out the Web Academy in Fayetteville, NC. They have over 70 courses. www.ccswebacademy.net

Train online with Element K. Develop your skills on a broad range of Adobe software and related design topics with these affordable online classes. Choose from self-paced beginning to intermediate courses developed by honest-to-goodness Adobe Certified Experts. Try it today and take advantage of a free sample course for Photoshop 6.0. http://adobe.0mm.com/ADB233011

◆ Internet Sites of Interest

Reference Websites

- Encyclopedia Britannica: http://www.britannica.com/
- Funk and Wagnalls: http://funkandwagnalls.com/
- Library of Congress: http://lcweb.loc.gov/library/
- Information Please (almanac): http://www.infoplease.com/
- Kid's Encyclopedia: http://www.letsfindout.com/subjects/
- Lycos (homework help): http://www.lycoszone.com/homework.html

What's another way to say___? Find an answer here. http://www.thesaurus.com

Post Cards of the States http://www.postcardsfrom.com/teach.html

eThemes Education Resource http://emints.more.net/ethemes

Internet Resources for Missouri's Teachers (Organized by subject)
http://solutions.more.net:2068/extranet/deseweb/index.jsp

Schoolkit Online Gold www.schoolkit.com
This site is full of interactive lessons with teaching guides, based on Microsoft applications, predominantly Office products. You download the lessons and they belong to you.

Variety of current topics - National Public Radio http://www.npr.org/

Variety of teacher and student activities. http://fyi.cnn.com/fyi/teachers.tools/